An Analysis of Text Readability in 9th Grade English Textbook Using FRE Formula on Readable Software

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Abstract
This study measured the readability level of reading texts in English textbook. This study used a text level complexity approach and used quantitative method by utilizing Flesch Reading Ease formula by Rudolph Flesch and calculate by software www.readable.com. The purpose of this study is to find out the readability level of reading texts in English textbook entitled “Bahasa Inggris Think Globally Act Locally SMP/MTs Kelas IX junior high school Published by the Ministry of Education and Culture of Indonesia”. The textbook is revised in 2018 of curriculum 2013. The source of the data in this study were 35 reading texts divided into four levels are: Fairly Difficult, Standard, Fairly Easy, and Easy. While the data in this study were 7 reading texts taken purposively (procedure text, narrative text and report text). The result showed that the textbook is not readable to IX grade of Junior High School. By a final average of 71.54 is "Fairly Easy level" between 70 to 80 for grade VII. Meanwhile, for grade IX should be at average amount of 60 to 70 at “Standard” level. Thus, the analysis of readability level of English textbook is needed in education world. As the best contribution and information for school institution in Indonesia.

Keywords: Readability, Textbook, Flesch Reading Ease

Abstrak
Penelitian ini mengukur tingkat keterbacaan teks bacaan dalam buku teks bahasa Inggris. Penelitian ini menggunakan pendekatan tingkat kompleksitas teks dengan menggunakan metode kuantitatif dengan rumus Flesch Reading Ease oleh Rudolph Flesch dan dihitung oleh perangkat lunak www.readable.com. Tujuan dari penelitian ini adalah untuk mengetahui tingkat keterbacaan teks bacaan dalam buku teks Bahasa Inggris yang berjudul "Bahasa Inggris Think Globally Act Local SMP / MTs Kelas IX SMP yang Diterbitkan oleh Kementerian Pendidikan dan Kebudayaan Indonesia". Buku teks tersebut direvisi pada tahun 2018 dengan kurikulum 2013. Sumber data dalam penelitian ini adalah 35 teks bacaan yang dibagi menjadi empat tingkatan adalah: Cukup Sulit, Standar, Cukup Mudah, dan Mudah. Sementara, data dalam penelitian ini adalah 7 teks bacaan yang diambil secara purposif (teks prosedur, teks naratif dan teks report). Hasil penelitian memunjukkan bahwa buku teks tidak dapat dibaca untuk kelas IX SMP. Dengan rata-rata akhir 71.54 adalah tingkat "Cukup Mudah" level antara 70 hingga 80 untuk kelas VII. Sementara itu, untuk kelas IX harus memiliki jumlah rata-rata adalah 60 hingga 70 berlevel "Standar". Dengan demikian, analisis
tingkat keterbacaan buku teks bahasa Inggris sangat dibutuhkan dalam dunia pendidikan. Sebagai kontribusi dan informasi terbaik untuk institusi sekolah di Indonesia.

**Kata Kunci:** Keterbacaan, Buku Teks, *Flesch Reading Ease*

I. **INTRODUCTION**

In the early years of 20th century, curriculum was traditionally-conceptualized to be identical to syllabus. Based on statement by Bestor (1904) that “He believes that the mission of the school should be intellectual training.” However, this basic concept means merely a set of sequence lessons to be delivered in conducting teaching and learning process. Earlier statement is also similar to what was stated by Hutchins (1899) that “Views curriculum as ‘permanent studies’ where the rules of grammar, rhetoric and logic and mathematics for basic education are emphasized.” In this way, the curriculum was the core of the whole categorization of lessons that the learners needed to receive.

Along with its development, the concept has lately evolved. Correlating with language base, Brown (2000) stated that curriculum designs are set to meet the particular language program which concerning to broader linguistic and subject matter specifications, also the objective, sequencing, and material in defined context. There are complex considerations in establishing curriculum. To compare, it is seen that there are several inadequacies of old-fashioned curriculum appears from its objectives that setting a sort of lesson plan should also consider the context that it is occasionally inappropriate to several groups of students but not for others. The whole concerns are characterised for achieving better teaching and learning environment and process.

The teaching and learning process should be a cooperative activity and communication between the teacher and students. This process will shape an educational goal. Additionally, a classroom management is a one of part to assess the goal while also keep the substantial teaching and learning process. The whole combination seems to have complete as what was stated by (Brown, 2000) but a material or textbook is also the important aspect. A textbook is considered to be medium between teacher and students since it enables to complete what teacher could not gauge, like an exercise. Consequently, a textbook also plays role in having cooperative activity and communication between teacher and students.
The educational institutions, mainly public legal schools, selecting appropriate textbooks for student categorically takes time. It should take a lot of considerations in selecting textbook. Those considerations, in this case ‘English’ are, such as its syntactic complexity, cohesion devises, readability and so forth. Similar to an argument by Cunningsworth (1995) that a textbook should be best seen the main basis in terms of students’ needs in realizing aims and objectives that have already established. Hence, it is seen to be what both teacher and students own in supporting better English Language Teaching (ELT). Concerning to that, a textbook containing texts, exercises, explanations and so on supports the ELT condition in Indonesia as suggested by Jusuf (2018, p. 18) that textbook has a significant role because it will aid teachers in providing knowledge containing in the textbook as material to be learnt by students in limited hours in teaching and learning process.

Regarding to the textbook, Seguin (1989, p. 20) also added that it serves as a key component for teacher and student to gain an understanding of language usage, level, quantity of information and also illustrations which seems that those components should be kept in terms of designing a textbook mainly to what academic English is. In line with that, Lebrun et al. (2002) assumed that school textbooks are essential in shaping the teachers and students’ pedagogical context. In this case, textbook is considered to be a component of academic English comprising tasks, assessments, guidelines for teaching that are well-known as academic English.

Earlier statement about academic English is characterized as stated by Anstrom, et al. (2010, p. 9) that the academic English used in educational settings and being used for academic purposes at its simplest level. Since it is used for an academic setting, a textbook should be containing the four English skills which are receptive and adaptive skills referring to both teacher and students speaking English variously whether standard or un-standard English or native or nonnative speaker.

The academic English characteristics have different levels in various grades. Also, in agreement with Muslikhati (2015, p. 1) the textbook should comply with the study level. This focus is also strengthened by Crandall (1995) statement that the really most vital consideration in deciding textbook distributed to students is that making a reading in textbook gradually developed and noticing the text and topic of reading. In this case, it is seen that the difficulty of text is one of consideration in enacting text, mainly questioning
which grade will be appropriate to comprehend which text. Since, a text with high level difficulty will not be understood among lower student’s text comprehension and vice versa.

Understanding the role of reading skill, then it rises the curiosity to the reading text in English textbook of senior high school published by Ministry of Education and Culture. Since, it should implement a reading text difficulty to the proper grade. Synonymously, a proper text should be read and comprehended to proper grade. Besides, the variety of reading text difficulty levels is faced by various grades and should have different textbook level by all means of containing text complexity level theory. As mentioned by CCSS document (2010, p. 43) a difficulty in the text or commonly known as text complexity is ‘the inherent difficulty of reading and comprehending a text combined with the considerations of reader and task variables’ (cited in Fang, 2016, p. 196) or difficulties that occur in reading and understanding the texts. From all those statements, it can be concluded that the text complexity level plays a vital role in selecting textbook to be appropriate to the grade or simply the student’s level. Particularly, reading complexity level shows the level of reading complexity or a text readability whether it is appropriate or not appropriate by its grade and level. Additionally, relating to literacy, a popular literature means how easy text to read which consists of number of characters, situation, and themes, while also mirroring the the infinite variety of lives (Stanton, 1965: 9 cited in Roifah, 2014)

Several studies have revealed readability issues in terms of student’s textbook (Indrawan, 2018; Rohmatillah, 2015; Alipah, 2019). Indrawan (2018) evaluated Indonesian students’ textbook of senior high school to perceive text readability and also supported by its syntactic complexity. The instruments to be used in his research is Flesch-Kincaid Grade Level (FKGL) to evaluate the text readability and used syntactic complexity analyser (SCA) to gauge its syntactic complexity. Shockingly, the result found that the 10th grade English textbook is more difficult than the 11th grade English textbook by considering both readability and syntactic complexity of reading texts. Among all researches concerning to reading text in student’s textbook. Then the present research is motivated to perceive and evaluate as well as focus on reading texts towards merely 9th grade English textbook. The textbook is entitled “Bahasa Inggris Think Globally Act Locally SMP/MTs Kelas IX junior high school Published by the Ministry of Education and Culture of Indonesia”.

The textbook covers all four needed English skills which are listening, speaking, reading and writing. This textbook was developed also published by Ministry of Education and Culture of Indonesia team. This textbook is based on Curriculum in 2013 which has
been revised in 2018. The textbook consists of 218 pages and 11 chapters. Each chapter presents a learning aims, warmer: word finding, vocabulary builder, pronunciation practice, vocabulary exercise, grammar review, skills, reflection. These aspects are in accordance with what chapter talks about in which those whole combinations are expected to support all English skills to be carried by students. However, the focus of this study is only to the reading skills which focuses on reading texts which aiming at questioning: to know readability level of reading texts in textbook of Bahasa Inggris Think Globally Act Locally SMP/MTs Kelas IX junior high school Published by the Ministry of Education and Culture of Indonesia Revised in 2018 based with FRE formula.

II. RESEARCH METHOD

This study applied quantitative approach. It was aimed at knowing as well as measuring readability level of reading texts in students’ textbook, mainly the 9th graders. The source of data in this study was taken from Indonesian English textbooks entitled “Bahasa Inggris Think Globally Act Locally SMP/MTs Kelas IX junior high school Published by the Ministry of Education and Culture of Indonesia”. Furthermore, the data were taken from the total reading texts in each chapter containing in the textbook which were 35 in total. The data were taken by selecting purposively focusing on reading skills mainly reading texts then differentiated them into each chapter. Last, this research was based on readability text analyzer proposed by Rudolph Flesch (1948) and used text readability automatic analyzer of Flesch Reading Ease program obtained at website https://readable.com/.

III. FINDINGS AND DISCUSSION

3.1 Data Description

The total texts are 35 texts. Out of 35 texts, the researcher utilized Flesch Reading Ease Program from https://readable.com/ to find out the readability level of reading texts in the textbook entitled “Bahasa Inggris Think Globally Act Locally SMP/MTs Kelas IX junior high school Published by the Ministry of Education and Culture of Indonesia”. Such tool will measure several aspects among sentence count, word count and syllable count, ASL, ASW and Flesch reading ease score. All those aspects are automatically formulated by the tool which then
emerges to the conclusion that the reading text has significant numeric scores in terms of readability formula.

An ASL stands for Average Sentence Length. This term will measure sentences by counting the average sentences in whole text. Meanwhile, ASW stands for Average Syllable per Word. This will take account into dividing the number of syllables in each number of words. Then, Sentence Count will responsible for counting the number of sentences among each sentence in whole text. A sentence will be considered if it is a complete sentence existing minimally subject + verb + agreement and is ended by full stop, as it is known that a single sentence may possess more than one clause. Then, Word Count measures how many words in total in a whole text. Then last one, a Syllable Count measures the word-forming unit composed by one phoneme or phoneme sequences, such as: dictionary if translated in Bahasa Indonesia will ‘kamus’, such word will be considered having two syllables since it has two unit phonemes of ‘ka & mus’ also the word ‘eat’ in English will be considered as one unit phoneme or simply having one syllable. Such tool will measure all those aspects and is obtained by the numeric scores. The following table is the result of sentences, words and syllables of reading text containing in each chapter as presented in graphic 3.1:

Graphic 3.1 The Description of Sentences, Words, and Syllables Count

<table>
<thead>
<tr>
<th></th>
<th>Number of Sentence</th>
<th>Number of Word</th>
<th>Number of Syllable</th>
</tr>
</thead>
<tbody>
<tr>
<td>C4/T</td>
<td>15</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>C4/T</td>
<td>12</td>
<td>10</td>
<td>82</td>
</tr>
<tr>
<td>C4/T</td>
<td>10</td>
<td>82</td>
<td>11</td>
</tr>
<tr>
<td>C7/T</td>
<td>42</td>
<td>54</td>
<td>67</td>
</tr>
<tr>
<td>C9/T</td>
<td>10</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>C9/T</td>
<td>10</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>C9/T</td>
<td>6</td>
<td>98</td>
<td>15</td>
</tr>
</tbody>
</table>

Then the following is the calculation of result of ASL (average sentence length) and ASW (average number of syllables per word) of reading text containing in each chapter as presented in graphic 3.2:
Then the last one is the calculation of reading texts by Flesch Reading Ease. Such tool will measure reading text. Simply, a text will be considered or perceived easy to comprehend or nor readable to students if the score emerging is high, meanwhile, if the emerging score shows low score it means that the reading text is difficult to be read and understood. Also, it can be noticed that such reading text is whether or not proper to grade students. The following graphic is the result after inserting each reading text in the textbook as seen in graphic 3.3:

<table>
<thead>
<tr>
<th>Text</th>
<th>Readability Level</th>
<th>Difficult Level</th>
<th>Reading Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chapter 4</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Text 1</td>
<td>87.0</td>
<td>Easy</td>
<td>6th grade</td>
</tr>
<tr>
<td>Text 2</td>
<td>69.2</td>
<td>Standard</td>
<td>8th to 9th grade</td>
</tr>
<tr>
<td>Text 3</td>
<td>77.8</td>
<td>Fairly Easy</td>
<td>7th grade</td>
</tr>
<tr>
<td><strong>Chapter 7</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Text 1</td>
<td>89.0</td>
<td>Easy</td>
<td>6th grade</td>
</tr>
<tr>
<td><strong>Chapter 9</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Text 1</td>
<td>58.3</td>
<td>Fairly Difficult</td>
<td>10th to 12th grade</td>
</tr>
<tr>
<td>Text 2</td>
<td>65.6</td>
<td>Standard</td>
<td>8th to 9th grade</td>
</tr>
<tr>
<td>Text 3</td>
<td>53.9</td>
<td>Fairly Difficult</td>
<td>10th to 12th grade</td>
</tr>
</tbody>
</table>
Table 3.3 the calculation of reading texts by Flesch Reading Ease

<table>
<thead>
<tr>
<th>Total</th>
<th>500,8:7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>71.54</td>
</tr>
</tbody>
</table>

3.2 Discussion

In analyzing the data, the writer has four steps to measure the level of readability. First, the writer explored the English textbook. Second, the writer searched the readable automatic program. Third, the writer chose the reading text in all chapters. Fourth, the writer input the reading texts by purposive sampling method.

The result of the data analyzed by using Flesch Reading ease program, there were 7 reading texts in the textbook was classified into four levels:

1. Fairly Difficult: there were 2 reading texts in this level. The readability score started from 50 to 60. First, C9/T1 has score 58.3. Second, C9/T3 has score 53.9.
2. Standard: there were 2 reading text in this level. The readability score started from 60 to 70. First, C9/T2 has score 65.6. Second, C4/T1 has score 69.2.
3. Fairly Easy: there was 1 reading text in this level. The readability score started from 70 to 80. First, C2/T2 has score 77.8.
4. Easy: there were 2 reading texts in this level. The readability score started from 80 to 90. First, C2/T1 has score 87.0. Second, C7/T1 has score 89.0.

After the researcher do analyzing the data, it is seen that the scores indicate the degree of readability variation in the textbook. The findings show after being proceed with Flesch Reading Ease formula. As seen, among the whole texts, the readability result from the average of all findings is 71.54 (fairly easy) for grade 7th. However, out of 35 text data, it is only found 2 texts are in accordance with the level of readability of grade IX which are 1 text in chapter 4, and 1 text in chapter 9. To be concluded, the reading texts in the textbook are at Fairly Easy Level (70-80) to read in the textbook entitled “Bahasa Inggris Think Globally Act Locally SMP/MTs Kelas IX junior high school Published by the Ministry of Education and Culture of Indonesia”. As revision textbook in 2018 by using Curriculum 2013.”

In line with theory of Flesch Reading Ease by Rudolph Flesch, there are 5 texts which are the inappropriate to the level and only 2 texts that are proper to the level of 9th grade students of Jenior High School. Besides it all, the reading texts in textbook entitled “Bahasa Inggris Think Globally Act Locally SMP/MTs Kelas IX junior high school Published by the Ministry of Education and Culture of Indonesia”. The revision textbook in 2018 Curriculum 2013.
IV. CONCLUSION

After analyzing the data, it is found readability level of reading texts in textbook entitled “Bahasa Inggris Think Globally Act Locally SMP/MTs Kelas IX junior high school Published by the Ministry of Education and Culture of Indonesia”. The textbook is revised in 2018 of Curriculum 2013”. Then it is analyzed by using Flesch Reading Ease automatic analyzer from www.readable.com. It is concluded that out of 35 reading texts, they are categorized in four levels: 1) Fairly Difficult: 2 reading texts are in the level of 10th to 12th grade. 2) Standard: 2 reading texts are in the level of 8th to 9th grade. 3) Fairly Easy: 1 reading text is in the level of 7th grade and 4) Easy: 2 reading texts are in the level of 7th grade.

Briefly, after all numbers of reading texts are proceed through Flesch Reading Ease's Grade Level, it is mentioned that the reading texts in the textbook are lower than to proper level. Only two texts are proper for 9th grade level. It is suggested that the reading texts should be at level Standard to achieve their grade level. The outcome of statistical average of Flesch Readability Formula showed that the reading texts are at Fairly Easy level (71.54). While it is not the Mean standard level towards grade 9th of senior high school level, because for grade 9th level of Senior High School, it should be at 60 to 70 score at the mean score in Standard level. The mean score calculates the reading texts existing in textbook and finds it is not readable for grade 9th of Junior High School grade in academic English Textbook.

REFERENCES


